Physician Race and Ethnicity, Professional Satisfaction, and Work-Related Stress: Results from the Physician Worklife Study

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There are limited data about minority physicians' professional satisfaction and job stress. In this study, we describe by race and ethnicity, satisfaction, and job stress among a national sample of physicians. We analyzed data from 2,217 respondents to the Physicians' Worklife Survey (PWS), a career satisfaction survey of physicians drawn from the AMA Physician Masterfile. Scales measuring overall job and career satisfaction and work-related stress were constructed from Likert-response items. We examined the association between physician ethnicity and each of these scales. Respondents included 57 black, 134 Hispanic, 400 Asian or Pacific Islander, and 1,626 white physicians. In general, minority physicians appeared to serve a more demanding patient base than did white physicians. Hispanic physicians reported significantly higher job ($p=0.05$) and career ($p=0.03$) satisfaction compared to white physicians but no significant difference in stress. Asian or Pacific Islander physicians averaged lower job satisfaction ($p=0.01$) and higher stress ($p<0.01$) compared to white physicians. Black physicians did not differ significantly from white physicians on any of the three measures. Significant racial and ethnic variations were found with respect to several specific satisfaction domains: autonomy, patient care issues, relations with staff, relations with the community, pay, and resources.

Key words: physician job satisfaction ■ job stress ■ career satisfaction ■ ethnicity

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BACKGROUND

Physicians from racial and ethnic minority groups, particularly those that are under-represented in the healthcare workforce, provide care for more disadvantaged patients, on average, than white physicians in the United States. Studies have demonstrated that nonwhite physicians care for Medicaid beneficiaries and low-income and uninsured patients more frequently than white physicians. As a result, nonwhite physicians tend to see patients with worse health status and more acute complaints, chronic conditions, functional limitations, and psychological symptoms.[1-6] This uneven distribution of patients results both from minority physicians' choosing to practice in underserved areas and from minority patients, many of whom are disadvantaged, seeking out physicians from their own racial/ethnic background. Presumably, patients make such selections because they are more comfortable with physicians who are of the same race.[7]

In addition to handling more demanding patient panels, minority physicians may also face other potential stressors related to workplace conditions, professional isolation, high expectations as societal "role models," or a tendency to be shoehorned into specific professional roles. Yet little is known about how the professional and practice characteristics of minority physicians affect their work experiences and satisfaction. As the United States moves forward to build a physician base that is more representative of the nation's population, it is important to understand the impact of the current medical environment on the professional satisfaction and experiences of physicians from racial and ethnic minority groups.

We present data from a national physician survey to describe the relative levels of professional satisfaction and stress reported by physicians of different racial and ethnic backgrounds. We also examine the characteristics of minority physicians' patient panels and how such characteristics may relate to their professional satisfaction.

METHODS

Subjects

The sampling design of the Physician Worklife Survey (PWS) has been previously described in detail.[8] Briefly, a national probability sample of physicians in family practice, general internal medicine, pediatrics, internal medicine subspecialties, or pediatric subspecialties was drawn from the AMA Masterfile. The sampling frame was stratified on the basis of indicators of physician race (white or missing vs. all other), physician specialty (as categorized above), and penetration of managed care in the state of registry (state in highest quartile of proportion of physicians with managed care contracts vs. all other states). These categories created 20 strata, which were disproportionately sampled to produce a final sample of 5,704 physicians. Physicians in states with high levels of managed care penetration, those practicing subspecialties, and those from racial and ethnic minority groups were oversampled. The survey was mailed up to four times, resulting in 2,326 usable responses. Taking into account an estimated noncontact rate of 18%, this corresponds to an adjusted response rate of 52%.[9] Further assessment of the correlation between time to response and 140 variables collected on the survey identified only four variables with Spearman correlation coefficients greater than 0.10. This suggests minimal differences between early and late responders in most characteristics and presumably between responders and nonresponders. However, white physicians averaged a much shorter time to return than did physicians of any other racial/ethnic category. After an initial lower response rate from minority physicians, nationally recognized minority physicians appealed to minority physicians to return their surveys. This may have improved the minority physician response rate.

The current analyses exclude respondents who either did not report their race or ethnicity (n=13) or who reported an ethnic group other than white, black, Asian or Pacific Islander, or Hispanic (n=60). Similarly, respondents with missing scores on the global job satisfaction scale (n=20), the global career satisfaction scale (n=14), or the stress scale (n=2) were excluded. These eliminations resulted in a final sample size for these analyses of 2,217 physicians.

Measures of Professional Satisfaction

Development and validation of the PWS items

Table 1. Demographic Characteristics of Participants in the Physician Worklife Study

Respondents, n (%)	White 1,626 (73%)	Black 57 (3%)	Asian or Pacific Islander 400 (18%)	Hispanic 134 (6%)	Total 2,217
Gender & Marital Status					
Female *	24%	49%	39%	13%	26%
Married	86%	73%	83%	85%	85%
Average Age*	46.8	46.3	47.4	46.2	46.9
*Income**					
Less than $100,000	22%	17%	24%	12%	22%
$100,000–$149,999	35%	58%	32%	25%	35%
$150,000–$249,999	26%	12%	17%	28%	25%
$250,000 or more	7%	10%	5%	15%	7%
*Specialty**					
Family Practice	40%	43%	23%	26%	38%
Internal Medicine	30%	23%	47%	36%	32%
Internal Medicine Specialty	9%	5%	5%	16%	9%
Pediatrics	17%	29%	21%	15%	18%
Pediatric Specialty	2%	1%	4%	7%	2%
*Practice Type**					
Solo Practice	17%	20%	29%	15%	19%
Small Group	42%	26%	29%	42%	40%
Large Single Specialty Group	5%	0%	2%	9%	5%
Large Multi-Specialty Group	13%	7%	8%	7%	12%
Group/Staff Model HMO	6%	18%	9%	6%	6%
Academic Group	8%	15%	8%	12%	8%
Other	9%	12%	13%	2%	9%

* $p<0.01$ for test of no difference between racial/ethnic categories

and scales has been described elsewhere.[10,11] The PWS was an eight-page, 150-item mail survey that measured physician practice characteristics and professional satisfaction. Survey items were developed from existing satisfaction measures,[12,13] physician focus groups (including focus groups with physicians from racial and ethnic minority groups), and analysis of open-ended responses from a survey of physicians in large group practices.[14] The resulting items were refined by an expert panel and then tested on a pilot group of 2,000 physicians. Factor and reliability analyses resulted in a final list of 36 items measuring 10 domains of satisfaction: autonomy; relationships with patients; relationships with colleagues; relationships with staff; patient care issues; personal time; community; income; administration; and resources. In a parallel process, global measures of job satisfaction (five items) and career satisfaction (four items) were developed. Each individual item used a 1–5 Likert response format, and the sums were scaled to a 1–5 range in our analyses. Although each item on the job satisfaction scales was ordinal, the combined scales have 20–25 possible response values and were therefore treated as continuous. Internal consistencies for the 10 satisfaction domains ranged from 0.65 to 0.77, and for the global satisfaction measures 0.86 to 0.88. The 10 domains accounted for 58% of the variance seen in global job satisfaction. The stress index was a four-item version of the previously validated Perceived Stress Scale[15] and had an internal consistency reliability of 0.75 in this sample.

Data Analysis

All respondents were asked to identify their own racial or ethnic group, by choosing one race or ethnic group from 10 possible categories: (white American-born, white other, black African-American, black African descent, Asian or Pacific Islander, Hispanic Puerto Rican, Hispanic Mexican, Hispanic other, Native American or Alaskan Native, or other). Because of sample size limitations, we could not utilize all of these categories in the analysis. Primary analyses used data consolidated into only four racial/ethnic categories: black (African-American and African), white (American born and other), Hispanic (Puerto Rican, Mexican, and other), and Asian or Pacific Islander.

The primary outcome measures for our analyses included global career satisfaction, global job satisfaction, and stress. We also examined differences by physician race and ethnicity separately for the 10 specific domains of professional satisfaction.

Chi-squared tests or analyses of variance were used to assess differences in demographic characteristics (age, sex, and marital status), and practice setting. Based on regression models adjusted for survey design, combined F-tests were used to assess differences in patient panel characteristics (percent female, elderly, speaking little or no English, with complex/numerous medical problems, with complex/numerous psychosocial problems, with substance abuse problems, on Medicaid, uninsured, and patient race/ethnic identity) across physician racial/ethnic categories. We tested for racial differences in professional satisfaction using analysis of variance methods for bivariate analyses and linear regression for multivariate analyses. To provide an adjusted estimate of the effect of physician

Table 2. Professional Satisfaction Domain Scores#, By Physician Race/Ethnicity

Global Measures	White	Black	Asian or Pacific Islander	Hispanic	Total
*Career Satisfaction**	3.71 (0.03)	3.92 (0.12)	3.57 (0.07)	3.97 (0.13)	3.71 (0.03)
Job Satisfaction*	3.72 (0.03)	3.79 (0.15)	3.41 (0.06)	3.93 (0.11)	3.70 (0.03)
Stress*	2.33 (0.03)	2.33 (0.10)	2.54 (0.05)	2.30 (0.09)	2.35 (0.02)
Satisfaction Domains					
Autonomy*	3.39 (0.03)	3.39 (0.11)	3.09 (0.06)	3.73 (0.07)	3.35 (0.02)
Relationships with patients	3.84 (0.03)	3.95 (0.18)	3.88 (0.06)	3.93 (0.07)	3.85 (0.03)
Relationships with colleagues	3.66 (0.02)	3.66 (0.11)	3.61 (0.05)	3.53 (0.08)	3.65 (0.02)
Patient care issues*	3.13 (0.03)	3.51 (0.14)	2.96 (0.06)	3.39 (0.10)	3.13 (0.03)
Relationships with staff*	3.80 (0.02)	3.65 (0.11)	3.54 (0.05)	3.60 (0.11)	3.76 (0.02)
Personal time	2.86 (0.03)	2.86 (0.12)	2.94 (0.06)	3.06 (0.08)	2.87 (0.03)
Relationships with community*	3.76 (0.03)	3.82 (0.12)	3.43 (0.06)	3.54 (0.13)	3.72 (0.03)
Pay*	3.09 (0.03)	2.85 (0.18)	2.67 (0.07)	3.09 (0.20)	3.03 (0.03)
Administrative issues	2.60 (0.03)	2.68 (0.16)	2.62 (0.07)	2.74 (0.10)	2.61 (0.03)
Resources (supplies, exam rooms, staff)*	3.64 (0.03)	3.20 (0.15)	3.44 (0.05)	3.77 (0.09)	3.61 (0.02)

Reported as means (standard error); * $p<0.05$ for test of no difference between racial/ethnic categories

race on job satisfaction, career satisfaction, and stress, we calculated regression models examining the independent association of physician race with each of these dependent variables, after adjusting for physician demographic characteristics. Demographic covariates included age (continuous), marital status (married versus all other), sex, and annual income category (<$100,000, $100,000–$149,000, $150,000–$249,000, and $250,000 or more). We hypothesized that the effect of race and ethnicity on professional satisfaction may operate in part through mediating variables such as practice characteristics (practice setting and specialty) and patient characteristics. To explore this possibility, we calculated regression models that added physician practice characteristics (specialty and practice setting), and patient panel characteristics (percent of patients female, elderly, with limited English, with complex medical problems, with complex psychosocial problems, with substance abuse problems, on Medicaid, or uninsured) as independent variables. All regression models were adjusted to account for stratified sampling in the survey design and differing response rates. For multiple regression models, independent variables with missing values were assigned the mean value, and an indicator variable for such imputations was included in the models. Covariates with missing values included age (n=17 missing), income (n=305), practice type (n=19), fraction of patients using Medicaid (n=367), fraction of patients uninsured (n=421), and other patient panel characteristics (n=30).

All analyses were conducted using the SAS system (Cary, NC) version 8.2 or Stata version 8.0 (College Station, TX).

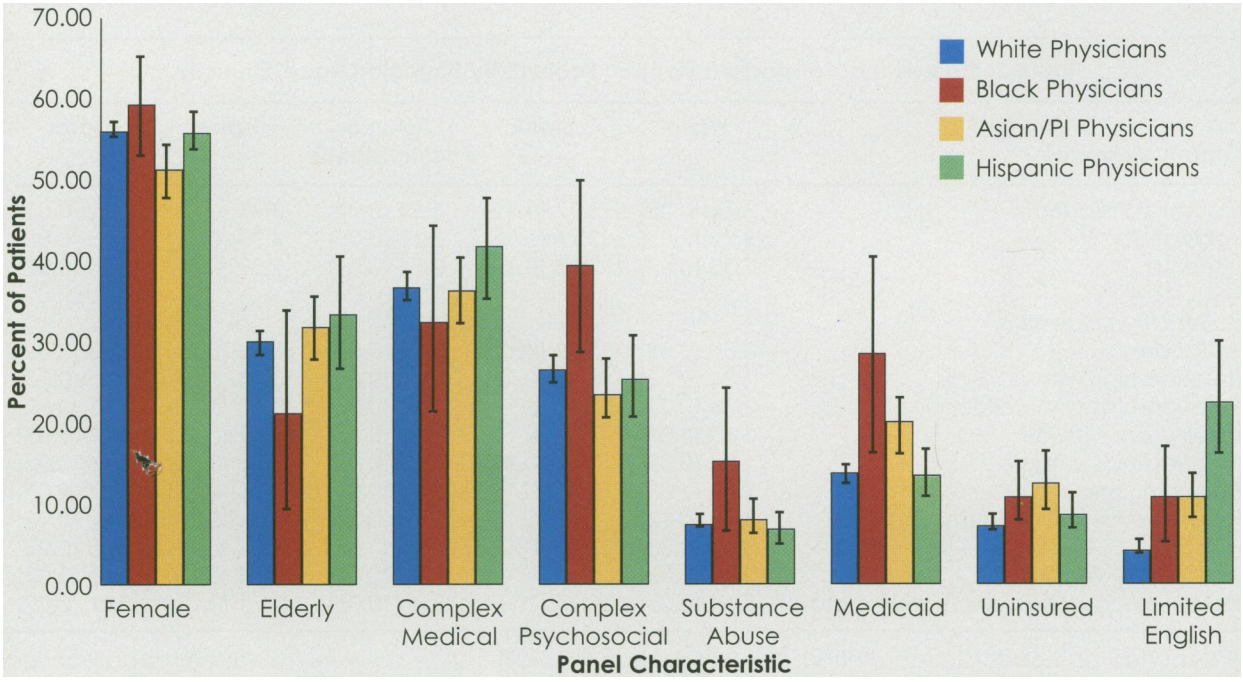
RESULTS

Most respondents to the PWS identified themselves as white (73%). Asian or Pacific Islander physicians represented 18% of respondents, Hispanic physicians 6%, and black physicians 3%. Black physicians were more likely to be female. Although the distribution of income was fairly similar for white, black, and Asian or Pacific Islander physicians, Hispanic physicians tended to report higher incomes (Table 1). However, this finding may be the result of differential reporting rates. The fraction of respondents without information on income was greater for Hispanic (17.9%) and Asian or Pacific Islander (19.8%) than for white (12.1%) and black (8.8%) physicians.

Among black and white physicians, family practice was the most commonly reported specialty. In contrast, Asian or Pacific Islander and Hispanic physicians were more likely to report practicing internal medicine.

There were also some notable differences in practice type along racial and ethnic lines. White and Hispanic physicians were more likely than black or Asian or Pacific Islander physicians to work in a small group setting. Asian or Pacific Islander physicians were more likely than others to work in a solo practice.

Figure 1. Characteristics of Patient Panels, by Physician Racial/Ethnic Identity



Patient Panel Characteristics

There were significant differences across physician race and ethnicity in the percent of patient panels described as: speaking little or no English ($p<0.01$), and on Medicaid ($p=0.01$) (Figure 1). Differences in percent of uninsured patients or of patients with complex psychosocial problems were not significant ($p<0.10$). In general, minority physicians appeared to serve a more demanding patient base than did white physicians. For example, black physicians reported the greatest percentage of Medicaid patients and patients with complex psychosocial problems, Asian or Pacific Islander physicians reported the greatest percentage of uninsured patients, and Hispanic physicians reported the largest proportion of patients with limited English. Additionally, there was a significant difference in the sex distribution of patient panels, with Asian or Pacific Islander physicians reporting lower proportions of female patients than other physicians ($p=0.03$).

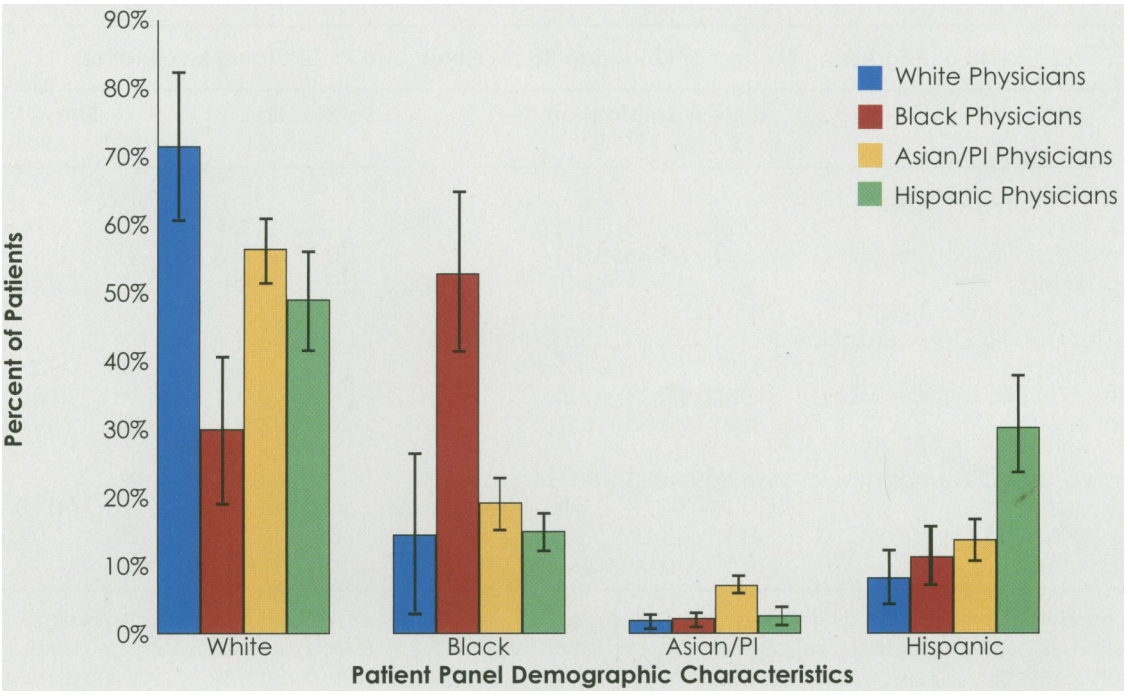
Physicians of each racial or ethnic group reported higher proportions of their patient base as being from their own racial or ethnic group than did physicians of other racial or ethnic groups; e.g., black patients constituted a larger proportion of the patient panels of black physicians than the patient panels of nonblack physicians (Figure 2). In every case, this difference was highly significant ($p<0.01$). Although the differences are not as striking, nonwhite physicians also tended to care for more nonwhite patients not of their own racial or ethnic category than did white physicians. For example, Asian or Pacific Islander physicians cared for a greater percentage of black and Hispanic patients than did white physicians.

Professional Satisfaction

Most respondents to the PWS reported high levels of professional satisfaction. For example, 78% of respondents either agreed or strongly agreed with the statement, "Overall, I am pleased with my work" (a component of the career satisfaction scale). Similarly, 69% agreed or strongly agreed with the statement, "Overall, I am satisfied in my current practice" (a component of the job satisfaction scale).

Mean scores on global satisfaction measures, stress, and the 10 specific satisfaction domains are shown in Table 2. Small but significant differences across racial/ethnic groups were evident in both the global job ($p<0.01$) and career ($p=0.01$) satisfaction measures and in work-related stress ($p<0.01$). Overall, Asian or Pacific Islander physicians tended to experience lower job satisfaction ($p<0.01$) and higher stress ($p<0.01$) than white physicians. Asian or Pacific Islander physicians also averaged lower career satisfaction, although this difference was not statistically significant ($p=0.11$). Hispanic physicians, in contrast, reported higher job ($p=0.05$) and career ($p=0.03$) satisfaction than white physicians and minimal differences in stress ($p=0.82$). Black physicians showed a trend towards higher career satisfaction ($p=0.09$) than white physicians and no differences in job satisfaction

Figure 2. Racial/Ethnic Composition of Patient Panels, by Physician Racial/Ethnic Identity



(p=0.64) or stress (p=0.71).

Racial and ethnic variations in mean scores on the specific job satisfaction domains were significant for autonomy, patient care issues, relations with staff, relations with the community, pay, and resources. The patterns generally corresponded to those found for the global professional satisfaction measures. For each of these six domains in which there were significant differences across physician race/ethnic group, Asian or Pacific Islander physicians reported significantly lower satisfaction compared to white physicians ($p<0.01$ for all). Black physicians reported significantly higher satisfaction with patient care issues (p=0.01) and significantly lower satisfaction with resources ($p<0.01$). For example, while 43% of white physicians agreed with the statement, "Many patients demand potentially unnecessary treatments," only 20% of black physicians agreed. Although the relationship was only significant for Asian or Pacific Islander physicians, black and Hispanic physicians also reported lower satisfaction with relations with staff (p=0.17 for black physicians and p=0.07 for Hispanic physicians). Hispanic physicians differed significantly from white physicians only with respect to patient care issues (p=0.01) and satisfaction with personal time (p=0.04). In both of these domains, Hispanic physicians reported greater levels of satisfaction than white physicians.

After controlling for age, sex, marital status, and income, significant differences remained in mean levels of job satisfaction, career satisfaction, and stress across physician race and ethnicity (Table 3). Hispanic physicians reported significantly higher levels of career and job satisfaction compared to whites. Asian or Pacific Islander physicians reported significantly higher stress levels and significantly lower job satisfaction than white physicians. Black physicians reported higher career satisfaction than white physicians, but the difference was not statistically significant. Differences between black and white physicians with respect to job satisfaction and stress were small and nonsignificant. Additional adjustment for specialty and practice type did not substantively change these findings.

As expected, patient panel characteristics were significantly associated with professional satisfaction. For example, stress was positively correlated with percent of patients with complex psychosocial problems (p=0.01), substance abuse problems (p=0.01), and on Medicaid (p=0.01). However, despite the finding that minority physicians had generally more-demanding patient panels, inclusion of patient panel characteristics in a regression model did not substantively change the associations between physician race and ethnicity and professional satisfaction.

DISCUSSION

In a national survey of physicians, we found that professional satisfaction differed by physician race and ethnicity. Asian or Pacific Islander physicians reported lower job satisfaction and higher stress than white physicians, while Hispanic physicians were significantly more satisfied with their jobs and careers than white physicians. Black physicians did not exhibit a significant difference in job or career satis-

Table 3. Regression Models of Physician Race/Ethnic and Professional Satisfaction

	Career Satisfaction		Job Satisfaction		Stress	
	β	95% CI	β	95% CI	β	95% CI
*Adjusted for MD Demographics**						
Black MDs	0.20	(-0.03, 0.43)	0.07	(-0.22, 0.36)	-0.04	(-.24, 0.16)
Asian or Pacific Islander MD's	-0.11	(-0.26, 0.03)	-0.29	(-0.43, -0.15)	0.21	(0.09, 0.33)
Hispanic MDs	0.29	(0.04, 0.54)	0.23	(0.01, 0.45)	-0.02	(-0.22, 0.17)
*Adjusted for MD Demographics and Practice Characteristics^*						
Black MDs	0.20	(-0.06, 0.47)	0.10	(-0.22, 0.43)	-0.06	(-0.26, 0.15)
Asian or Pacific Islander MD's	-0.03	(-0.17, 0.12)	-0.22	(-0.36, -0.07)	0.18	(0.05, 0.30)
Hispanic MDs	0.29	(0.05, 0.53)	0.27	(0.07, 0.47)	-0.01	(-2.1, 0.18)
Adjusted for MD Demographics and Patient Characteristics#						
Black MDs	0.19	(-0.06, 0.44)	0.09	(-0.21, 0.39)	-0.09	(-0.28, 0.11)
Asian or Pacific Islander MD's	-0.15	(-0.29, -0.01)	-0.30	(-0.44, -0.15)	0.20	(0.09, 0.32)
Hispanic MDs	0.30	(0.04, 0.56)	0.25	(0.01, 0.49)	-0.04	(-0.23, 0.16)

* All models are relative to white physicians. Adjusted for sex, marital status, age, and income category; ^ Practice characteristics include specialty and practice type; # Patient characteristics include percent of patients: female, elderly, speaking little or no English, with complex/numerous medical problems, with complex/numerous psychosocial problems, with substance abuse problems, on Medicaid, uninsured.

faction or stress. Although the differences in mean satisfaction scores across groups appeared small, previously published results from the PWS indicate that these differences in satisfaction may be an indication of significant underlying discontent, as measured by intent to leave a job or low perceived health.[16] For example, a decrease of 0.3 points in job satisfaction (the unadjusted difference observed between white and Asian or Pacific Islander physicians) was associated with a 16% increase in the odds of planning to leave direct patient care within the next five years. These findings are consistent with prior research showing that dissatisfied primary care physicians were much more likely than others to leave a practice over a four-year follow-up period.[17]

Consistent with previous research, we found that minority physicians were more likely to serve high-demand or underserved populations, and we found expected associations between patient panel characteristics and physician satisfaction. Surprisingly, however, panel characteristics did not appear to explain racial or ethnic differences in physicians' job or career satisfaction. Nor were these differences in professional satisfaction explained by physicians' demographic characteristics or practice characteristics. Exploration of specific facets of professional satisfaction suggests that satisfaction with patient care issues is important in explaining the pattern of global satisfaction measures observed. This facet of satisfaction was measured with four questions, addressing: adversarial relationships with patients; feeling overwhelmed by patient needs; patients demanding unnecessary treatments; and time pressures impairing relationships with patient. Black and Hispanic physicians reported higher satisfaction with patient care issues compared to white physicians, while Asian or Pacific Islander physicians reported lower satisfaction. Both black and Asian or Pacific Islander physicians reported significantly lower satisfaction with resources, as might be expected if patient panels are disproportionately low-income. Low professional satisfaction among Asian or Pacific Islander physicians appeared to extend to several additional facets of work life, including autonomy, relations with staff, relations with community, pay, and resources.

Our study was limited in several important respects. The data were cross-sectional and therefore cannot provide insight into the temporal sequence of workplace conditions and professional satisfaction. Small sample size, especially for under-represented minority physicians, may have impaired our ability to identify important aspects of worklife experiences. Despite efforts to draw a nationally representative sample, the small number of minority respondents limits the external validity of the findings reported here. As with any survey, our results are subject to potential nonresponse bias. Nonrespondents may have systematically differed from respondents in their work lives and professional satisfaction, and to the extent that such differences varied by race or ethnicity, our findings may not accurately reflect true racial or ethnic differences in physician satisfaction. Finally, we consolidated specific ethnic categories into broader groups, thus possibly obscuring differences within major categories.

These limitations notwithstanding, we believe our results have important implications regarding minority physicians in the United States. Physicians' professional satisfaction is linked to patient satisfaction[18] and to patient adherence to medical recommendations.[19] Previous studies have investigated professional satisfaction of physicians across genders or specialties, but there is limited information on satisfaction among minority physicians except in academic settings. Physicians from racial and ethnic minority groups might be expected to have low satisfaction due to demanding patient panels, overt or covert workplace discrimination, and stress associated with professional isolation. In this study, black and Hispanic physicians indicated that, despite these concerns, they had high levels of overall professional satisfaction. The finding of greater satisfaction among Hispanic physicians is consistent with results from the Women Physicians' Health Study (WPHS), in which female Hispanic physicians reported higher work control and career satisfaction compared to white, black, or Asian or Pacific Islander physicians.[20] In contrast, results from the WPHS suggested black female physicians were more likely to be dissatisfied that with their career than white female physicians, while Asian or Pacific Islander female physicians had greater career satisfaction. The differences between the WPHS results and the PWS reported here may be due to sex differences in satisfaction. Our sample is too small to adequately explore this possibility, but the association of career satisfaction and race may vary by sex.

These results have relevance to understanding the consequences of affirmative action programs for potential beneficiaries. One possible concern about affirmative action is whether the selection process ultimately places under-represented minority physicians at risk of higher work stress or professional dissatisfaction. In this study, neither black nor Hispanic physicians report systematically lower professional satisfaction or higher stress than white and Asian or Pacific Islander physicians. In fact, Hispanic physicians have higher satisfaction. The facets of professional satisfaction in which minority physicians report lower satisfaction, such as resources, highlight the care many minority physicians provide to underserved populations.

Factors that undermine the professional satisfaction of minority physicians, if they translate into pro-

fessional burnout or retirement from clinical work, may thus lead to lesser access to care for underserved communities. Our findings suggest that Asian or Pacific Islander physicians are at greater risk of experiencing low job satisfaction and that this experience may be in part a consequence of dissatisfaction with patient care issues. These factors, while a source of frustration for many physicians, are likely to especially impact physicians caring for underserved populations. In this data set, for example, low satisfaction on patient care issues was significantly predicted by percent of patients on Medicaid.

Black physicians, who care for a greater percentage of Medicaid patients than white or Asian or Pacific Islander physicians, reported greater levels of satisfaction with patient care issues. It is not clear what aspect of black physicians' work experiences could be offsetting the potential stressors of underserved patient panels and low satisfaction with resources. Some of the difference may be explained by expectations and orientation of physicians. In the PWS, physician satisfaction with patient care issues was significantly predicted by the extent to which psychosocial aspects of practice were emphasized during clinical training. Another source of indirect evidence arises from the American Association of Medical Colleges 2001 survey of medical school graduates. In this survey, under-represented minority graduates were substantially more likely than others to endorse the statement, "everyone is entitled to receive adequate medical care;" to believe that healthcare access is a major problem; and to believe that physicians can influence health and disease prevention.[21] Such beliefs could increase the satisfaction gained from providing medical care in demanding contexts.

In summary, racial/ethnic variations in physician satisfaction exist but are not entirely explained by demographic characteristics, practice setting, or patient panel characteristics. Future research should further explore differences in physician satisfaction for different racial and ethnic groups. Researchers should investigate how patient characteristics influence satisfaction for different physicians and how the racial and ethnic diversity of the patient panel influences satisfaction. Policymakers should consider the potential impact of low reimbursement rates and inadequate resources for care of the underserved on the willingness of physicians, including specifically minority physicians, to remain in practice.

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